MATERIAL SAFETY DATA SHEET

FOR COATINGS, RESINS AND RELATED MATERIALS

NPM 110-36118

DATE OF PREP.

2/82

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

Section I

MANUFACTURER'S NAME

BOSTIK WEST. DIVISION OF EMHART CORPORATION

STREET ADDRESS

20846 S. NORMANDIE AVE. CITY STATE AND ZIPCODE

TORRANCE, CA.

90502

EMERGENCYTELEPHONE NO. (213)320-6800

PRODUCT CLASS

EPOXY

MANUFACTURERS CODE IDENTIFICATION

463-3-101

Catalyst: CA-118

Mix Ratio: 3 parts 463-3-101(Base) to

1 part CA-118 by volume.

TRADE NAME BOSTIK

Section II — HAZARDOUS INGREDIENTS

INGREDIENT 463-3-101(base Only)	CAS NO.	PERCENT (Wt.)	TI PPM	mg/M³	LEĻ	VAPOR PRESSURE
		e need to be a second of the second				
Cellosolve Acetate	111-15-9	10–15	100		1.7	2.0
Methyl Ethyl Ketone	78-93-3	10-15	200		1.8	70.0
Toluene	108-88-3	<5.0	200		1.2	22.0
Xylene	1330-20-7	<5.0	100	America	1.0	7.0
Butyl Acetate	123-86-4	<5.0	150		1.7	8.0
Butyl Cellosolve	111-76-2	<5.0	50		1.1	1.0
Butyl Alcohol	71-36-3	<1.0	100		1.7	4.0

Section III — PHYSICAL DATA

BOILING RANGE

176-340° F.

VAPOR DENSITY

HEAVIER

LIGHTER, THAN AIR

EVAPORATION RATE

X SLOWER, THAN ETHER

PERCENT VOLATILE

60%

WEIGHT PER GALLON

10.7 lbs.

Section IV — FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY

Red Label, Flammable

23° F. Tag Closed Cup

LEL 1..0

EXTINGUISHING MEDIA

Exclude air-Use foam, CO2, steam, wate

dry chemicals. Do not use water.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapor forms explosive mixture with

upper and lower explosion limits.

SPECIAL FIRE FIGHTING PROCEDURES

Do not use water, exclude air, use water to cool fire exposed surfaces and to

personnel.

Section V — HEALTH HAZARD DATA

THRESHOLDLIMIT VALUE: See Section II

EFFECTS OF OVEREXPOSURE: Headache, nausea, dizziness. Breathing vapor will be irritating to nose, throat and eyes.

EMERGENCY AND FIRST AID PROCEDURES Skin Exposure: Wash affected area with soap & water. Eye Exposure: Flush with water for at least 15 minutes, consult physician.

Ingestion: Consult physician immediately.

Inhalation: Remove victim to fresh air, consult physician.

. §	ection V	1 - R	EACTIV	VITY I	DATA

STABILITY UNSTABLE XX STABLE CONDITIONS TO AVOID: Storage at high temperate incompartability (Materials to avoid) Strong oxidizing agents, Inorganic acids, Sparks & open hazardous decomposition products: By fire, CO, CO ₂ , Oxides of Nitrogen. Avoid contact with water, alcohols, amines & other compounds which react wisocyanates.	flame
HAZARDOUS POLYMERIZATION MAY OCCUR XX WILL NOT OCCUR CONDITIONS TO AVOID	

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate sources of ignition and clear funes from area. Prevent liquid from entering sewers, water sources, or low areas. Keep unnecessary personnel away. Shut off source, if possible to do so without hazard. Contain spilled liquid with sawdust or oil absorbing compound. Wash waste disposal method area with detergent & water. Consult disposal expert & ensure conformity with local regulations.

Section VIII — SPECIAL PROTECTION INFORMATION

mask if used in non-ventilated area.

Mechanical: Explosion-proof ventilation equipment. No areliance in the second secon

Mechanical: Explosion-proof ventilation equipment. No smoking or open lights.

VENTILATION Face velosity > 60 fpm in confined area.

PROTECTIVE GLOVES: Chemically resistent gloves.

EYE PROTECTION: Chemical splash goggles or face shield.

OTHER PROTECTIVE EQUIPMENT: Eye bath & safety shower.

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Material is sensitive to moisture and should be kept in tightly closed containers.

OTHER PRECAUTIONS

All handling equipment should be electrically grounded. Treat as a very flammable liquid.

Kenneth J. Silberberg Technical Administrative Manager

MATERIAL SAFETY DATA SHEET

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP 10 - 81

Section I

BOSTIK WEST, DIV. OF USM CORPORATION, AN EMHART UNIT

STREET ADDRESS 20846 So. Normandie Ave. city. STATE, AND ZIP CODE TOTTANCE, Ca. 90502

320-6800 EMERGENCY TELEPHONE NO. (213)

PRODUCT CLASS

AMINE ABDUCT.

TRADE NAME

BOSTIK

IANUFACTURERS CODE IDENTIFICATION

Catalyst for: 453-3-Series, 463-3-Series

463-3-8, 454-3-Series. Mix Ratio: 3 parts

Base to 1 part CA-118 by volume.

Section II — HAZARDOUS INGREDIENTS

INGREDIENT CA-118 Epoxy Catalyst	CAS No.	PERCENT (Wt.)	PPM T	LV mg/M³	LEL	VAPOR PRESSURE IIIII 118
Methyl ethyl ketone	78-93-3	25-30	200	10 yr	1.8	70.0
Butyl alcohol	71–36–3	20-25	100		1.7	4.0
Butyl acetate	123-86-4	20–25	150		1.7	8.0
Butyl cellosolve	111-76-2	10-15	50		1.1	1.0
Toluene	108-88-3	< 5.0 :	200		1.2	22.0
Diethylenetriamine(DETA)	111-40-0	Trace	1.0		1.4	< 1.0

Section III - PHYSICAL DATA

BOILING RANGE

176-340° F.

VAPOR DENSITY

HEAVIER

LIGHTER, THAN AIR

EVAPORATION RATE

FASTER

X SLOWER, THAN ETHER

PERCENT VOLATILE BY VOLUME

87%

GALLON

7.0 lbs.

Section IV - FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY

Red Label, Flammable

(Min) FLASH POINT

23° F. Tag Closed Cup

1.1

EXTINGUISHING MEDIA

Exclude air - Use foam, CO2, steam, water fog,

dry chemicals. Do not use water.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapor forms explosive mixture with air between

upper and lower explosion limits.

SPECIAL FIRE FIGHTING PROCEDURES

Do not use water, exclude air, use water spray to cool fire exposed surfaces and to protect personnel.

Section V — HEALTH HAZARD DATA See Section II THRESHOLD LIMIT VALUE EFFECTS OF OVEREXPOSURE Headache, nausea, dizziness. Breathing vapor will be irritating to nose, throat, and eyes. EMERGENCY AND FIRST AID PROCEDURES Skin Exposure: Wash affected area with soap and Eye Exposure: Flush with water for at least 15 minutes, consult Ingestion: Consult physician immediately. physician. Inhalation: Remove victim to fresh air, consult physician. Section VI — REACTIVITY DATA XX STABLE conditions to avoid Storage at high temperatures. INCOMPATABILITY (Materials to avoid) Strong oxidizing agents. Sparks & open flame. HAZARDOUS DECOMPOSITION PRODUCTS On combustion CO, CO2, Aldehydes and other organics, oxides of nitrogen. HAZARDOUS POLYMERIZATION MAY OCCUR XX WILL NOT OCCUR CONDITIONS TO AVOID Section VII — SPILL OR LEAK PROCEDURES STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate sources of ignition and clear fumes from area. Prevent liquied from entering sewers, water sources, or low areas. Keep unnecessary personnel away. Shut off source, if possible to do so without wasted by hazard. Contain spilled liquid with sawdust, sand or oil absorbing compound. Wash area with detergent & water. Consult disposal expert and ensure conformity with local regulations. Section VIII — SPECIAL PROTECTION INFORMATION RESPIRATORY PROTECTION : Use approved respiratory protection such as an air-supplied mask if used in non ventilated area. Mechanical: Explosion-proof ventilation equipment. No smoking or open lights. ventilation: Face velosity > 60 fpm in confined area. PROTECTIVE GLOVES Chemically resistant gloves. EYE PROTECTION Chemical splash goggles or face shield. OTHER PROTECTIVE EQUIPMENT Eye bath & Safety shower. Section IX — SPECIAL PRECAUTIONS PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers closed when not in use Do handle or store near flame, heat or strong oxidants. Adequate ventilation required. Containers of this product may be hazardous when emptied -these other precautions containers retain product residues (vapor, liquid, etc.). All handling equipment should be electrically grounded. Treat as a very flammable liquid.

Technical Administrative Manager